

CLAIMS

1. A method for detecting a protein having a disulfide bond, comprising: protecting by chemically modifying a free SH group of a protein in a sample to be tested; cleaving a disulfide bond of the free SH group-protected protein to expose SH groups; and detecting the exposed SH groups.
2. The method of claim 1, wherein the exposed SH groups are detected by reacting the exposed SH groups with an SH group-labeling substance, and detecting the labeled SH groups.
3. The method of claim 2, wherein the protein in a sample to be tested is separated by two-dimensional electrophoresis before detection of the labeled SH groups.
4. The method of claim 2 or 3, wherein chemical modification is carried out by alkylation with iodoacetamide and the SH group-labeling substance is monobromobimane.
5. A method for detecting an allergen protein, comprising: protecting by chemically modifying a free SH group of a protein in a sample to be tested; cleaving a disulfide bond of the free SH group-protected protein to expose SH groups; and detecting the exposed SH groups.
6. The method of claim 5, wherein the exposed SH groups are detected by reacting the exposed SH groups with an SH group-labeling substance, and detecting the labeled SH groups.
7. The method of claim 6, wherein the protein in a sample to be tested is

separated by two-dimensional electrophoresis before detection of the labeled SH groups.

8. The method of claim 6 or 7, wherein chemical modification is carried out by alkylation with iodoacetamide and the SH group-labeling substance is monobromobimane.

9. The method of any one of claims 5 to 8, wherein the sample to be tested is a protein extract from seeds of gramineous plants, pollens, mites, or house dust.

10. A kit for detecting a protein having a disulfide bond or an allergen protein, containing an SH group-protecting agent and an SH group-detecting substance.

11. A kit for detecting a protein having a disulfide bond or an allergen protein, containing iodoacetamide and monobromobimane.

12. The kit of claim 10 or 11, further containing a reducing agent.